

Remarks/Arguments:

Claim Rejections Under 35 U.S.C. §102 and §103

Claims 17-33, 35 and 36 stand rejected under 35 U.S.C. §102 as anticipated by U.S. Patent No. 6,543,355 (Steil). Claim 34 stands rejected as unpatentable over Steil in view of U.S. Patent No. 5,950,538 (Puschnerat). Applicants traverse these rejections.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." M.P.E.P. §2131 *citing Verdegaa Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

"To establish a prima facie case of obviousness, ... the prior art reference (or references when combined) must teach or suggest all the claim limitations." M.P.E.P. §2143. Additionally, as set forth by the Supreme Court in *KSR Int'l Co. v. Teleflex, Inc.*, No. 04-1350 (U.S. Apr. 30, 2007), it is necessary to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the prior art elements in the manner claimed.

Independent claim 17 recites "[a] rotation body for a printing machine, comprising: a stator including at least one stator winding, the stator having a support end and a free end; and a rotor positioned about and enclosing the stator free end, the rotor including at least one permanent magnet and positioned for rotation relative to the stator, the rotor extending from a first bearing to a second, spaced apart bearing and the at least one permanent magnet provided over substantially all of the area along the longitudinal axis of the rotor between the first and second bearings, wherein current flowing through the stator winding interacts with the at least one permanent magnet and generates a torque acting on the rotor."

With the claimed configuration, the stator has a support end and a free end which is enclosed within the rotor. Such a configuration generally creates a magnetically sealed system such that magnetic effects on neighboring metallic objects can be minimized as explained in the original application at page 4, last paragraph. Furthermore, such compact structure provides a compact such that the rotation body can provide a bearing at one or both ends of the cylinder or roller body as shown in Figs. 4a and 4b.

The Office Action cites to Figure 4 of Steil as teaching a stator 39, a rotor 37 including permanent magnets 38 and bearings 42. As shown in Figure 4, the stator 39 extends between

and is attached to the lateral frames 08 and 09. As indicated in the Office Action on page 3, with such a configuration, "the magnetic field generated by a stator extends outwardly indefinitely." With such a system, the magnetic field may effect neighboring metallic objects. Furthermore, Steil teaches the stator shaft 39 extending between the lateral frames 08 and 09, thereby requiring a significantly rigid structure, of necessary size and material, to extend the whole length. Steil does not recognize nor teach the advantages of the compact rotation body as currently claimed and shown in Figs. 4a and 4b.

Applicants respectfully submit that Steil fails to teach or suggest each limitation of the claimed invention. Puschnerat is cited for a limited purpose with respect to claim 34 and does not overcome the shortcomings of Steil.

It is respectfully submitted that independent claim 17 is in condition for allowance. Claims 18-35 each depend from claim 17 and are therefore allowable for at least their dependency on allowable claim 17.

Independent claim 36 recites "[a] method of driving a cylinder or roller of a printing machine, the method comprising: providing at least one rotation body comprising: a stator supported by the printing machine and including at least one stator winding; and a rotor including at least one permanent magnet and positioned for rotation relative to the stator, the rotor extending from a first bearing to a second, spaced apart bearing and the at least one permanent magnet provided over substantially all of the area along the longitudinal axis of the rotor between the first and second bearings; positioning a portion of a first end of the cylinder or roller about the rotor such that the rotor defines a bearing therefore; positioning a portion of a second end of the cylinder or roller about a secondary bearing; and selectively providing current through the stator winding."

Steil teaches stator 39 extending through rotor 37 and being supported at both ends via connection of the stator 39 to the lateral frames 08 and 09. Steil does not teach or suggest the rotor defining a bearing for a first end of the cylinder or roller and a secondary bearing at the second end of the cylinder or roller. It is respectfully submitted that independent claim 36 is in condition for allowance.

Independent claim 37 "a rotation assembly for a printing machine, comprising: a rotation body including a stator including at least one stator winding and a rotor including at

least one permanent magnet and positioned for rotation relative to the stator, the rotor extending from a first bearing to a second, spaced apart bearing and the at least one permanent magnet provided over substantially all of the area along the longitudinal axis of the rotor between the first and second bearings, wherein current flowing through the stator winding interacts with the at least one permanent magnet and generates a torque acting on the rotor; a cylinder body or roller body having opposed first and second ends with the rotor received in and rotatably supporting the first end; and a secondary bearing element rotatably supporting the second end."

As explained above, Steil teaches stator 39 extending through rotor 37 and being supported at both ends via connection of the stator 39 to the lateral frames 08 and 09. Steil does not teach or suggest the rotor rotatably supporting the first end of the cylinder or roller body and a secondary bearing element rotatably supporting the second end of the cylinder or roller body.

It is respectfully submitted that independent claim 37 is in condition for allowance. Claim 38 depends from claim 37 and is therefore allowable for at least the reasons set forth above. Claim 38 further recites that the secondary bearing element is a rotation body with a stator and rotor. Steil does not teach or suggest a cylinder or roller body supported by a pair of rotation bodies.

It is respectfully submitted that each of the pending claims is in condition for allowance. Early reconsideration and allowance of each of the pending claims are respectfully requested.

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If the Examiner believes an interview, either personal or telephonic, will advance the prosecution of this matter, the Examiner is invited to contact the undersigned to arrange the same.

Respectfully submitted,


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